

***FlyBy Math™* Alignment**
South Dakota Mathematics Content Standards
May 17, 2004

Algebra Standards

Indicator 3: Interpret and develop mathematical models.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
8.A.3.1. (Comprehension) Describe and determine linear relationships.	--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes. --Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system.

Indicator 4: Analyze and describe the properties and behaviors of relations, functions, and their inverses.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
8.A.4.1. (Synthesis) Create rules to explain the relationship between numbers when a change in the first variable affects the second variable.	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system. --Interpret the slope of a line in the context of a distance-rate-time problem.
8.A.4.2. (Analysis) Describe and represent relations using tables, graphs, and rules.	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

Measurement Standards

Indicator 1: Apply measurement concepts in practical applications.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
8.M.1.1. (Application) Apply proportional reasoning to solve measurement problems with rational number measurements.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Statistics and Probability Standards

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
8.S.1.2. (Application) Use a variety of visual representations to display data to make comparisons and predictions.	--Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.

	<p>--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.</p>
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